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AUTHOR Taylor, Mary Ann
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ABSTRACT

This project was conducted to develop a curriculum for dental auxiliary training in the dental specialty field of oral and maxillofacial surgery. Research was conducted to identify the major functions performed by an oral surgery assistant and then to organize these functions into an educational program that would provide adequate didactic and clinical training to prepare oral and maxillofacial surgical assistants. The material used in development of the curriculum was obtained from several sources. The first step in the study was to interview oral surgeons and their dental auxiliary to identify the role of an oral surgery assistant. This information was compiled into a task analysis that delineates the duties commonly assigned to the oral surgery assistant. Professional journals and textbooks were researched to explore the current trends, procedures, and techniques in the field. This information was used in the formulation and sequencing of curriculum content. Contacts were made with oral surgery offices and several hospitals and clinics to discuss and arrange for the clinical training experiences required in the curriculum. The curriculum that was designed during this project meets the minimum requirements of the American Association of Oral and Maxillofacial Surgeons and is currently being used at St. Louis Community College at Forest Park. The project researchers recommended that a procedures manual for training oral surgery assistants be developed for the future. (The curriculum is included in this report.) (Author/KC)

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FINAL REPORT

CURRICULUM PLANNING FOR ORAL AND MAXILLOFACIAL SURGERY ASSISTANT PROGRAM

(Project No. 84-131/132-600-2 (149-150)(B))

Mary Ann Taylor

St. Louis Community College
at Forest Park

St. Louis, Missouri

June 25, 1984

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Missouri Department of Education
Research Coordinating Unit
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ABSTRACT

The purpose of this project was to develop a curriculum for dental auxiliary training in the dental specialty field of Oral and Maxillofacial Surgery.

Research was conducted to identify the major functions performed by an oral surgery assistant and to then organize these functions into an educational program that would provide adequate didactic and clinical training to prepare individuals for positions in Oral and Maxillofacial Surgery Assisting.

The material used in development of the curriculum was obtained from several sources. The first step in the study was to interview oral surgeons and their dental auxiliary to identify the role of an oral surgery assistant. This information was compiled into a task analysis that delineates the duties commonly assigned to the oral surgery assistant.

Professional journals and textbooks were researched to explore the current trends, procedures and techniques in the field of Oral and Maxillofacial Surgery. The information aided in the formulation and sequencing of curriculum content.

Contacts were made with oral surgery offices and several hospitals and clinics to discuss and arrange for the clinical training experiences required in the curriculum.

During the course of the project it was recognized that there are numerous textbooks, publications and films available on the subject of oral surgery. Most material however, is addressed to the intern or practicing oral surgeon and therefore considerably beyond the scope and knowledge level required of an oral surgery assistant. Since instructional materials relevant to oral surgery assisting functions are limited, it is felt that the development of a clinical oral surgery procedures manual and/or specialized audiovisual lessons would be valuable assets in the training of oral surgery assistants.

The product, as it is currently designed, meets the minimum requirements for such a curriculum based on the guidelines set forth by the American Association of Oral and Maxillofacial Surgeons. The curriculum has been and will continue to be used in the Dental Technology Department of St. Louis Community College at Forest Park through the coming year. It is anticipated that this initial outline will require revision subsequent to this period.

BODY

Statement of the Problem:

In January 1983, the Dental Assisting National Board offered the first specialized certification examination for those persons completing a formal education program in Oral and Maxillofacial Surgery Assisting. In response to this recent innovation and the enthusiastic support of the dental community, the Dental Technology Department of St. Louis Community College at Forest Park planned to offer such a training program. Implementation of this program required extensive research and planning in order to develop a curriculum that would encompass the accreditation guidelines set forth by the American Association of Oral and Maxillofacial Surgeons. It was necessary to restructure the basic dental assisting course content in order to incorporate this program as an occupational option in dental auxiliary training.

Objectives:

1. Research specific duties delegated to an oral surgery assistant and compile a task analysis.

   The majority of this research was conducted through personal interviews with oral surgeons and their auxiliaries. The task analysis included in this report identifies specific job functions routinely delegated to a dental assistant in an oral surgery setting. The task analysis was used as a basis for developing the curriculum outline.

2. Explore current trends, procedures and techniques in the field of oral and maxillofacial surgery.

   Review and study of current oral surgery textbooks and journal articles provided information that was helpful in organizing the curriculum outline into categories of related surgical procedures. Although material available would be beneficial as resource and reference material, it was determined that there is very little available printed material directed to the tasks of the oral surgery assistant.

3. Contact community resources to devise and coordinate occupational training experiences in hospitals, dental offices and clinics.

   A considerable number of clinical training hours are

required for the oral surgery assisting student in office, clinic and hospital settings. Contacts were made to discuss the feasibility of such training and to arrange for the necessary requirements and supervision. The listing of facilities agreeing to participate in the training, including basic objectives, are attached.

4. Research, develop and organize instructional and audiovisual materials.

Several resources are available for audiovisual materials related to Oral and Maxillofacial Surgery. The Bureau of Health Education and Audiovisual Services of the American Dental Association has a wide variety of films available pertaining to specific surgical techniques. Most of these however, were developed ten or more years ago and many are beyond the scope of technical knowledge required of an oral surgery assistant. The National Audiovisual Center also has related media and although the topics are limited, the films available are more current and would be suitable for training oral surgery assisting students. There is other general material available for allied health occupations that could be utilized in training oral surgery assisting students such as taking vital signs, aseptic technique, and sterile gowning and gloving to name just a few. Nevertheless, it is felt that adequate relevant instructional material is lacking.

5. Correlate information gathered from research and develop final report.

The information gathered through this project has been utilized in the development of an initial outline of a curriculum for the training of dental assistants specializing in the field of Oral and Maxillofacial Surgery. Although the planned curriculum meets the basic requirements of the American Association of Oral and Maxillofacial Surgeons, it is expected that further revisions may be necessary after it is utilized and evaluated in the upcoming year. A copy of the interview guide used, the task analysis developed and the planned curriculum is included in this report.

Population and Sample:

The development of specific criteria for planning the curriculum was achieved by interviewing practicing oral surgeons and oral surgery assistants. The task analysis was compiled based on identification of treatments and procedures performed in the oral surgery office and hospital, as well as those responsibilities delegated to the assistant.

Conclusions and Recommendations:

This study has led to the development of a curriculum outline for a formal education program in Oral and Maxillofacial Surgery Assisting. The program as it is designed consists of 1200 hours of didactic and clinical courses based on guidelines provided by the American Assoication of Oral and Maxillofacial Surgeons. The results of this project provide a model for development of a vocational education program specifically designed to train persons for entry level positions as Oral and Maxillofacial Surgery Assistants. It is expected that the curriculum may require future modification and revision.

As discussed previously, it is felt that the development of a clinical oral surgery procedures manual and/or specialized audiovisual lessons would be very beneficial for training oral surgery assistants due to the lack of such material at this time.

Disclaimer:

"The activity which is ths subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Career and Adult Education. However, the opinions expressed herein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Career and Adult Education, and no official endorsement should be inferred."

ATTACHMENTS

Instruments:

The interview guide included in this report was used as a basis to determine job functions and duties delegated to an oral surgery assistant.

The task analysis attached was compiled after interviewing practicing oral surgeons and their auxiliaries.

ORAL AND MAXILLOFACIAL SURGERY ASSISTING

INTERVIEW GUIDE

Person Interviewed: _____

Collection of Clinical Diagnostic Data

1. What is the assistant's role in screening a new dental surgery patient?

2. What preliminary patient assessments should the assistant be able to perform? How much knowledge is expected in each area?

   Vital signs?
   General Physical Condition?
   Oral Inspection?
   Recognition of Abnormal Conditions?
   Other:

3. What is the assistants role in charting, record keeping, and recording treatments?

4. Other related procedures or functions:

Medical Emergencies

1. What are some of the emergency situations you would expect the assistant to be prepared for?

2. What are specific duties in an emergency?

3. Is assistant responsible for maintaining emergency cart? In what way?

4. Must she know how to prepare drugs and equipment for specific emergencies when requested? What specifically ?

5. Is CPR knowledge and certification required?

6. Other functions in emergency:

Radiographic Procedures

1. What x-ray duties are delegated to the assistant?

   determining types & number of films?
   exposing x-rays?
   developing x-rays?
   mounting and labelling?
   Other:

2. Other than intraoral films, what types of x-rays should the assistant be able to take?

3. Is assistant responsible for preliminary evaluation of x-rays?

4. Other x-ray functions:

Anesthesia

1. Do you expect tha assistant to know how to operate/maintain anesthesia equipment?

2. What is assistant's role in

   local anesthesia:

   nitrous oxide analgesia:

   I.V. sedation:

   general anesthesia:

3. Is assistant expected to monitor patient during treatment with anesthesia?

4. Is assistant responsible for an y prep or observation before or after anesthesia administration?

5. Other related functions:

Routine Chairside Procedures

1. What are the chairside functions of an assistant specific to oral surgery procedures?

   retraction and suction?
   instrument transfer?
   monitor vital signs?
   irrigation?
   pre and post operative instructions?
   prepare tray set-ups?
   apply topical anesthesia?
   remove sutures?
   place and remove surgical dressings?
   take impressions? Pour and trim?
   draw up medications?

2. Other related functions:

Aseptic Technique

1. Is surgery assistant responsible for sterilizing and cleaning instruments and equipment? What procedure is used?

2. What actions does/should assistant take to maintain asepsis of instruments, equipment and environment?

3. Other related duties:

Oral and Maxillofacial Surgery Procedures:

Identify whether the following procedures are performed in the hospital, office or both.
Identify whether the assistant prepares set-ups, assists or both

	OFFICE	HOSPITAL	SET UP	ASSIST
simple forceps extractions				
complex extractions				
occlusal equilibration				
soft tissue surgery				
suture removal				
dry socket treatment				
alveolectomy, alveoplasty				
apicoectomy, hemisection, retrograde				
frenectomy				
tori removal				
incision and drainage				
reduction of fractures				
orthognathic surgery				
mucosal grafts				
bone grafts				
vestibuloplasty				
TMJ surgery				
salivary gland surgery				
cyst and tumor enucleation				
reconstructive surgery				
temporomandibular joint manipulations				
OTHER:				

Hospital Oral Surgery Procedures:

1. If the auxiliary are to assist in hospital operating room surgery which skills should they be trained in?

   surgical scrub?
   gowning and gloving?
   sterile packings?
   principles of asepsis?
   Other:

Does the assistant perform other duties specific to managing or assisting

2. Does the assistant perform other duties specific to managing or assisting with the hospitalized oral surgery patient? What?

ADDITIONAL COMMENTS:

Oral and Maxillofacial Surgery Assistant

TASK ANALYSIS

(Tasks are grouped under major headings)

I. Collection of clinical diagnostic data

Obtain and record medical and dental history
Take and record vital signs and blood pressure
Prepare EKG monitor for use
Position attachments on patient for monitoring EKG
Chart conditions in the mouth
Prepare for and assist with biopsies, cultures and photographs
Take impressions for and prepare diagnostic study models
Expose various diagnostic intraoral and extraoral dental radiographs
Assess the patient's psychological attitude toward dental surgery during communication
Assess the patient's general physical condition
Implement proper care in treating the medically compromised patient
Describe and note abnormal findings in the oral cavity

II. Management and prevention of medical emergencies

Recognize the potential for a medical emergency in patients with a compromised medical history
Recognize the signs and symptoms of specific medical conditions and the emergencies that may occur
Identify by name and pharmacological action the drugs used to treat specific emergencies
Assemble and maintain emergency supplies, drugs and equipment
Check for proper functioning of emergency equipment and the expiration date of drugs at regular intervals
Assist with emergency situations according to office protocol

III. Radiographic Procedures

Expose dental films
Process films, taking precautions to avoid errors
Mount and label patient radiographs
Evaluate radiographs for diagnostic quality
Practice radiographic safety measures to protect both patient and operator during exposure
Recognize normal anatomical landmarks in both intra and extraoral radiographs

TASK ANALYSIS

IV. Routine chairside procedures

Seat the patient and adjust the dental chair and equipment for treatment
Maintain the field of operation during surgical procedures through:
- retraction
- suction
- irrigation
- light adjustment
- isolation

Monitor and record the patient's response to drugs and medications during the surgical procedure
Control minor post-operative bleeding
Irrigate sockets post-operatively
Assist with placement and removal of surgical dressings
Assist with and/or perform suture removal
Provide oral and written post-operative instructions to the patient following surgical procedures
Provide patient teaching and assistance with post-surgical dietary requirements for those undergoing prolonged fixation for treatments such as jaw fractures, osteotomies etc.
Dismiss patients after recovery from anesthesia and observation
Obtain written consent for surgical procedures

V. Assisting with Anesthesia

Understand the operation of and maintain all equipment utilized in general anesthesia, sedation and analgesia
Instruct patients in pre-surgical oral intake and requirements based on anesthetic to be used and procedure performed
Recognize and describe the action of specific agents used in inhalation and intravenous anesthetics
Draw up and prepare drugs used for intravenous sedation
Monitor patient reactions before, during and after the administration of nitrous oxide analgesia, I.V. sedation and general anesthesia
Prepare the armamentarium needed for administration of topical and local anesthesia
Place topical anesthesia for required injections
Maintain an open airway for the patient during surgical procedures involving general anesthesia, sedation or analgesia
Provide post-anesthetic recovery care to the patient including monitoring vital signs, positioning, and observation for complications

TASK ANALYSIS

VI. Maintaining Aseptic Techniques during Surgery

Clean and sterilize all surgical instruments
Disinfect and sanitize equipment and supplies as appropriate
Safely discard all disposable needles and syringes
Perform a surgical scrub as indicated
Provide storage for instruments and equipment that will maintain asepsis
Practice patient and operator protection to prevent disease transmission and cross-contamination

VII. Oral Maxillofacial Surgical Procedures

Select and prepare the tray set-ups and armamentarium for and assist in the following procedures:

simple forceps extraction
complex extraction including bone removal
occlusal equilibration
soft tissue surgery
suture removal
treatment of dry socket
Alveolectomy, alveoplasty
apicoectomy, hemisection, retrograde root filling
frenectomy
hard tissue surgery (tori removal, alveolar surgery)
incision and drainage

reduction of fractures (maxilla and mandible)
orthognathic surgery (osteotomies)
pre-prosthetic surgery (mucosal graft, bone graft, vestibuloplasty)
treatment of pathological lesions (TMJ surgery, salivary gland surgery, cyst and tumor enucleation)
reconstructive surgery (bone graft, skin and mucosal graft included)
temporomandibular joint manipulations

VIII, Hospital Oral Surgery Procedures

Arrange admission and schedule operating room for hospital surgical cases
Provide nutritional counseling and pre-operative information to patient
Perform surgical scrub
Gown and glove for operating room using aseptic surgical technique
Practice operating room protocol
Assist with all aspects of four-handed dentistry for oral surgery procedures adapted to the hospital operating room
Provide post-operative teaching to the oral surgery patient throughout the recovery period

COPY OF FINAL PRODUCT

ORAL AND MAXILLOFACIAL SURGERY ASSISTING CURRICULUM

ORAL AND MAXILLOFACIAL SURGERY ASSISTING

PROPOSED CURRICULUM

Note: All courses are based on 16 weeks for credit
1 Lecture hour = 1 credit
4-6 Lab/Clinic hours = 1 credit

First Semester Courses	Weeks	Lecture Per Wk.	Lab/ Clinic Per Wk.	Credit
Basic Dental Procedures *	4	8	16	3
Oral and Maxillofacial Surgery I *	12	8	15	8
Anatomy and Physiology I	16	2	4	3
				14
Second Semester Courses				
Oral and Maxillofacial Surgery II *	16	8	15	10
Dental Radiology	12	4	8	4
Anatomy and Physiology II	16	2	4	3
				17
Third Semester (Summer Session)				
Oral and Maxillofacial Surgery III * (Hospital Clinical)	4	0	24	4

* NOTE: The course outlines and objectives for the three didactic courses pertaining to assisting functions are included in this report as a representation of how oral surgery tasks were incorporated into the total curriculum.
Also included are the clinical facilities available for training along with the clinical objectives.

BASIC DENTAL PROCEDURES

Philosophy:

The purpose of this course is to teach an untrained individual those basic skills that would allow them to function at an entry level in a general dental practice. The information presented will introduce the student to dental terminology, communications, and the daily routine of the dental office. The skills acquired will prepare the student to enter the job market with a general knowledge of dentistry or to continue more specialized training in general dental chairside procedures or oral and maxillofacial surgery assisting procedures.

ST. LOUIS COMMUNITY COLLEGE AT FOREST PARK
DENTAL TECHNOLOGY DEPARTMENT

BASIC DENTAL PROCEDURES

COURSE OUTLINE

I. Orientation to basic dental procedures
   - A. Course scheduling
   - B. Attendance policy
   - C. Learning methods
     1. Lecture/Discussion
     2. Lab practice
     3. Clinical experience
   - D. Evaluation methods
     1. Written tests
     2. Performance evaluations
   - E. Dress Code

II. Personal and oral hygiene
   - A. Cleanliness and appearance
   - B. Hair styles and make-up for the health professional
   - C. Hand and nail care
   - D. Maintaining personal oral hygiene
   - E. Toothbrushing and flossing techniques

III. Communication techniques
   - A. Maintaining a positive self-image
   - B. Interpersonal relationships
   - C. Relating to others as a dental health professional
   - D. Therapeutic communication techniques
   - E. Telephone techniques

IV. Basic Dental Terminology
- A. Parts of a tooth
- B. The permanent dentition: names and numbering
- C. Arrangement of teeth in the dental arches
- D. Tooth surfaces
- E. Oral cavity structures
- F. Dental Specialties

V. Preparation of the dental operatory
- A. Care of evacuating equipment
- B. Disinfecting the dental unit and chair
- C. Principles of asepsis
- D. Handwashing techniques

VI. Preparation for dental treatment
- A. Components of the dental record
- B. Seating the patient
- C. Diagnostic aids
- D. Methods of maintaining a clear operating field

VII. Care of dental instruments
- A. Cleaning dental instruments
  - 1. Scrubbing
  - 2. Ultrasonic cleaner
- B. Disinfecting instruments
- C. Sterilizing instruments (steam under pressure)

VIII. Processing dental radiographs
- A. Darkroom and processing equipment
- B. Manual time-temperature processing
- C. Steps of processing procedure
- D. Handling exposed and processed radiographs

IX. Introduction to restorative procedures
- A. Dental restorative terminology
- B. Amalgam tooth restorations
- C. Common medicaments used in tooth restoration
- D. Esthetic tooth restorations
- E. Temporary restorations

COURSE OBJECTIVES

1. Acquire knowledge of dental procedures necessary to function at entry level in a general dental practice as demonstrated by at least 75% proficiency on written tests, 100% accuracy on self and instructor lab performance evaluations and satisfactory completion of clinical experience assignments.

2. Demonstrate the ability to communicate on a professional basis personnel and patients during clinical experiences and by observation, discussion and role-playing situations.

3. Identify in writing and verbally in parctice situations basic terminology commonly used in dentistry relating to parts, names, arrangement, surface and numbering of the teeth, and oral cavity structures.

4. Discuss the eight dental specialties and be able to identify the most common treatments performed and their rationale.

5. Prepare a dental operatory to receive a patient for treatment including care of evacuating equipment and disinfecting the dental unit.

6. Discuss the rationale for maintaining asepsis during dental treatment and demonstrate an understanding of the principles by performing correct handwashing technique throughout the course of clinical experience.

7. Identify and discuss the importance of all necessary information in a patient's dental record including things such as get-acquainted forms, medical/dental history, radiographs, dental charts, and insurance records.

8. Receive and seat a patient and obtain and organize dental records and basic instrumentation in preparation for dental treatment in both simulated and actual clinical settings according to given guidelines.

9. Identify and discuss the purpose of diagnostic instruments and aids used in an initial dental examination.

10. Describe methods of maintaining a clear operating field during dental treatment identify armamentoruim used, and discuss rationale for each.

11. Demonstrate the handling and care of dental instruments after treatment. Perform the process of cleaning, disinfecting, and sterilizing instruments according to standard guidelines.

12. Identify and discuss the purpose of equipment needed to process dental radiographs.

13. Describe in order the steps of the radiographic processing procedure and demonstrate the ability to develop a set of radiographs according to this procedure.

14. Define restorative terminology presented and demonstrate the ability to relate correct terms to common restorative procedures through discussion and in writing.

15. Differentiate between and identify the basic steps involved in an amalgam and an aesthetic restorative procedure. Select appropriate armamentorium needed for each procedure.

16. Identify the common medicaments used in amalgam and esthetic restorative procedures and select the materials needed for each.

17. Discuss the rationale for temporary restorations and identify the materials used.

ORAL AND MAXILLOFACIAL SURGERY ASSISTING I

Philosophy:

Oral and Maxillofacial Surgery Assisting I will provide the student with an introduction to the daily routine of an oral surgery dental office. The main emphasis will be to present the basic knowledge and skills necessary to function as part of the dental team in routine oral surgery procedures. The information presented will include review of head and neck anatomy, collection and recording of clinical data, introduction to anesthesia and pain control, and basic surgical procedures and instrumentation. In addition, basic dental terminology, instrumentation and background information about dental specialties and restorative procedures will be presented to provide the student with an understanding of the relationship between surgical procedures and general dental treatment.

Oral and Maxillofacial Surgery Assisting I

Course Outline:

I. Effective four-handed dentistry

Seating the dental patient
Positioning the dental team
Oral Evacuation techniques

II. Introduction to types and uses of Anesthesia

Local anesthesia
Analgesia/ conscious sedation
I.V. Sedation
General Anesthesia

III. Collection and recording of Clinical data

Medical/Dental History
Vital signs
Preliminary examination
Charting
Treatment documentation

IV. Head and Neck Anatomy

Osteology of the skull
TMJ Articulation
Anatomical landmarks
Muscles of the face, oral cavity and neck
Innervation of the face and oral cavity
Arterial supply and venous drainage
Lymphatic channels and Lymph nodes

V. Basic Principles of Restorative Dentistry and Dental Specialties

Amalgam procedures
Anterior restorative procedures
Pedodontic dental procedures
Orthodontic treatment
Crown and bridge prosthodontics
Removable prosthodontics
Endodontic procedures
Periodontics

VI. Introduction to Oral Surgery Procedures

Indications for surgical procedures
Routine extractions
Complex extractions
Instrumentation and armamentarium for extractions
Pre and post-operative instructions for the surgical patient
Post-operative management of the surgical patient
Assistant's role in oral surgery procedures

VII. Control of Microorganisms and Prevention of Disease Transmission

Introduction to Microbiology
Classifications of microorganisms
Infectious diseases in the dental office
Principles and methods of sterilization
Principles and methods of disinfection
Preventing cross-contamination
Surgical scrub

Oral and Maxillofacial Surgery Assisting I

Course Objectives:

Upon completion of this course the student should be able to:

1. Prepare the operatory and seat the patient for dental treatment.
2. Implement four-handed dentistry concepts in the positioning of the operator, patient and auxiliary for the performance of surgical procedures.
3. Maintain the operating field during surgical procedures by use of retraction, irrigation, evacuation, drying and light adjustment.
4. Assist with the administration of topical and local anesthetics.
5. Describe the procedure and identify the equipment needed for the administration of nitrous oxide/oxygen analgesia, I.V. sedation, and general anesthesia.
6. Monitor the patient's response during administration of Nitrous oxide/oxygen analgesia.
7. Implement the appropriate method of either sterilization, disinfection or sanitization for surgical instruments, equipment and supplies.
8. Identify modes of disease transmission and cross-contamination in the dental office. Implement methods to prevent transmission of microorganisms.
9. Perform a surgical scrub.
10. Select appropriate materials and prepare tray set-ups and all necessary armamentarium for:
    administration of anesthetics
    routine and complex forceps extractions
    post-operative treatment and complications
    suture removal
    treatment of dry socket
11. Provide and explain pre and post-operative instructions to the surgical patient including proper mouth care.
12. Utilize the principles of four-handed dentistry to assist with:
    administration of anesthetics
    extractions and impactions
    oral examination, diagnosis and treatment planning
    post-operative complications
    suture placement and removal

13. Identify the 22 bones of the skull. List and identify by location on a drawing or skull the 8 cranial bones and the 14 facial bones.

14. Given any specific bony landmark, identify the bone on which it is found and its function.

15. Identify the components and movement in the TMJ area. Describe possible causes of TMJ pain.

16. Identify the Cranial nerves that supply the face and oral cavity.

17. Describe the 3 divisions of the Trigeminal Nerve and identify the individual nerve branches on these divisions that innervate each tooth and specific area of the oral cavity.

18. Identify the 4 muscles of mastication and give the origin, insertion and function of each.

19. Identify the muscles of facial expression located around the mouth and eyes and explain the action of each.

20. List the areas supplied by the internal and external carotid arteries and specifically identify those areas supplied by each of the six main branches of the external carotid.

21. Locate and identify the branches of the internal and external jugular veins that drain specific areas of the face and oral cavity.

22. Identify components of the lymphatic system and discuss its function.

23. Describe and locate the major groups of lymph nodes that drain the teeth and oral cavity.

ORAL AND MAXILLOFACIAL SURGERY ASSISTING II

Philosophy:

A continuation of Oral and Maxillofacial Surgery Assisting I, Level II will provide the student with in-depth information in specialized oral surgery procedures, including reconstructive, pre-prosthetic and orthognathic surgery. The rationale for specific surgical procedures will be discussed, along with the preparation and instrumentation for each procedure and the role of the oral surgery assistant. Aspects of oral pathology likely to be encountered in the oral surgery office will be presented, along with pharmacology related to medical problems which exist or may arise during treatment of the oral surgery patient. Prevention and management of emergencies will be emphasized, including performance and certification in cardiopulmonary resuscitation. The student will be introduced to hospital and operating room protocol and management of the hospitalized oral surgery patient.

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DENTAL TECHNOLOGY DEPARTMENT

Oral and Maxillofacial Surgery Assisting II

COURSE OUTLINE

I. Prevention and Treatment of Medical Emergencies

- A. Office emergency protocol
- B. Emergency supplies, drugs and equipment
- C. Signs, symptoms and management of specific emergencies:
  1. Syncope
  2. Hyperventilation
  3. Allergic Reactions
  4. Airway Obstruction
  5. Asthma - Bronchospasm
  6. Angina Pectoris
  7. Heart Attack
  8. Diabetes
  9. Seizures: Epilepsy
  10. Adrenal Insufficiency
  11. Drug-related Emergencies
- D. Cardiopulmonary Resuscitation

II. Anesthesia

- A. Maintenance and care of equipment
- B. Patient preparation for:
  1. General Anesthesia
  2. I. V. Sedation
  3. Analgesia
- C. Assistant's role in monitoring the patient
- D. Post-anesthesia recovery room care
- E. Complications of anesthesia

III. Pharmacology related to Medical Conditions and Surgical Procedures

- A. Analgesics
- B. Sedatives, Hypnotics and Tranquilizers
- C. Antibiotics
- D. Cardiovascular Drugs
- E. Common medications for specific medical conditions

IV. Oral Pathology and Surgical Procedures

- A. Acute oral infections
- B. Chronic periapical infections
- C. Cysts of bone and soft tissue
- D. Salivary gland dysfunction
- E. Oral tumors and lesions
- F. Degenerative diseases of oral tissues
- G. Biopsy techniques

V. Surgical Correction of Developmental Anomalies

A. Cleft lip and cleft palate
B. Developmental deformities of the jaws
C. Tori removal

VI. Traumatic Injuries

A. Wounds and injuries of soft tissues
B. Injuries of teeth and alveolar process
C. Fractures of the jaw; reduction of fractures

VII. Reconstructive Surgery and Tissue Transplantation

A. Bone grafting
B. Skin grafts
C. Mucosal grafts
D. Tooth transplantation

VIII. Facial Pain, Headaches and Temporomandibular Joint Disorders

A. Neuralgias and facial pain syndromes
B. Nonsurgical management of TMJ disorders
C. Surgical treatment of TMJ problems

IX. Oral and Maxillofacial Surgery Procedures and Instrumentation

A. Soft tissue surgery
B. Alveolectomy, alveoplasty
C. Apicoectomy, hemisection, retrograde root filling
D. Frenectomy
E. Orthognathic surgery
F. Pre-prosthetic surgery

X. Care of the Hospitalized Oral Surgery Patient

A. Pre-operative Management; Nutritional Counseling
B. Hospital Arrangements
C. Operating Room Protocol
D. Complications and Preventive Measures
E. Post-operative Care

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DENTAL TECHNOLOGY DEPARTMENT

Oral and Maxillofacial Surgery Assisting II

COURSE OBJECTIVES

Upon completion of this course, the student should be able to:

1. Identify and explain the use of all emergency supplies, drugs and equipment utilized in an oral surgery office.

2. Recognize the signs and symptoms of a potential emergency situation for any medically-compromised patient. Discuss how the emergency would be managed, including use of any emergency drugs or supplies.

3. Demonstrate the ability to provide basic life support by performing cardio-pulmonary resuscitation on a manikin.

4. Monitor the patient's response during and after administration of anesthesia, sedation or analgesia, including vital signs, and maintaining an airway.

5. Differentiate between various drugs prescribed by the oral surgeon based on classification, action and use.

6. Recognize and give the rationale for the commonly-prescribed drugs used for specific medical conditions.

7. Monitor and record the patient's response to medications given during surgical procedures.

8. Describe and recognize the location and appearance of various pathological conditions occurring in the oral cavity. Prepare armamentarium and assist with the related surgical procedures.

9. Identify various biopsy techniques and prepare for and assist with the biopsy procedure.

10. Describe and give the rationale for both surgical and nonsurgical treatment of temporomandibular joint problems.

11. Discuss the methods of surgical correction for various developmental anomalies.

12. Identify specialized techniques utilized in reconstructive surgeries and tissue transplantation.

13. Select appropriate materials and prepare tray set-ups and all necessary armamentarium for:

    reduction of fractures
    reconstructive surgery and tissue transplantation
    soft tissue surgery
    alveolectomy, alveoplasty
    apicoectimy, hemisection, retrograde root filling
    frenectomy

orthognathic surgery
pre-prosthetic surgery

14. Utilize the principles of four-handed dentistry to assist with the above surgical procedures.

15. Demonstrate an understanding of operating room protocol by discussing operating room attire, draping procedures, surgical scrub and sterile techniques.

16. Counsel the surgical patient in pre- and post-operative dietary requirements based on the surgical procedure to be performed and the patient's medical history.

17. Describe the special requirements of assisting in oral surgery procedures under operating room conditions.

18. Discuss the patient preparation and special arrangements necessary for hospitalization of the oral surgery patient.

ORAL AND MAXILLOFACIAL SURGERY ASSISTING I,II,III

OCCUPATIONAL TRAINING EXPERIENCES
AND OBJECTIVES

ORAL MAXILLOFACIAL SURGERY ASSISTANT

OCCUPATIONAL TRAINING OBJECTIVES:

Oral Surgery Office Practice

1. Correlate classroom education with office procedures by observing and assisting with surgical treatment provided on an ambulatory basis in an oral surgery office.

2. Provide experiences for observing the daily functioning and routine of a surgical practice.

Dental Clinic Setting

1. Provide the student with exposure to a variety of presenting situations likely to be experienced in an ambulatory hospital or clinic setting.

2. Provide an opportunity to observe and understand the relationship between and interaction of the oral surgeon, physicians of other specialties and various other providers of health care.

Hospital Operating Room

1. Provide the student with an understanding of operating room protocol, surgical attire, and sterilization techniques.

2. Allow the student to observe surgical procedures and techniques performed solely in a hospital operating room, and to examine the instrumentation and armamentarium specific to such procedures.

3. Observe the hospitalized dental patient pre-and post-operatively, in both the immediate recovery period and beyond to enhance the understanding of the physical and psychological impact of oral surgery on an individual.

OCCUPATIONAL TRAINING EXPERIENCES

ORAL SURGERY OFFICE PRACTICES

			Hospital Affiliation
Boggiano, John G.	522 N. New Ballas	11810 Gravois	
Stemme, Robert R.	63041	63127	St. John's Mercy
Weber, Richard W.	432-8528	842-5340	
Merwin, Willaim D.	911 S. Brentwood	63105	Bellevue General
Pernoud, Michael	863-8050		
Rotskoff, Kenneth S.			St. Mary's Health Cente
Jackson, Richard	1031 Bellevue, Suite 311		
	63117		
	647-4222		
Hawkins, Robert J.	4201 S. Cloverleaf		St. Peter's Hospital
	St. Peter's MO.		

OCCUPATIONAL TRAINING EXPERIENCES

DENTAL CLINICS

Washington University School of Dental Medicine
Department of Oral Maxillofacial Surgery
4559 Scott Avenue 63110

Sclaroff, Allen
Delfino, John J.

John Cochran Veterans Administration Hospital
Dental Clinic - Willis Gray, D.D.S.
Chief of Dental Service
915 N, Grand 631

Gray, Willis
Chief, Dental Service

Jefferson Barracks Veterans Administration Hosp.
Dental Clinic
St. Louis, MO. 63125

Rowe, William E.

OCCUPATIONAL TRAINING EXPERIENCES

HOSPITAL OPERATING ROOM- Oral Maxillofacial Surgery

Hospital	Oral Surgeon	
St. Mary's Health Center 6420 Clayton Road 644-4600	Rotskoff, Kenneth Jackson, Michael	Liz Fey, C.D.A. - Supervising Assistant
Veterans Administration Hosp. John Cochran Division 915 N. Grand 652-4100	Willis Gray, Chief Oral Surgery Residents (WUDS)	

HOSPITAL OPERATING ROOM PROTOCOL AND SCRUB CLASS

St. Mary's Health Center 6420 Clayton Road 644-4600	Ann Bahr, R.N., Instructor .68-8289